

AMENDMENTS TO THE WRITTEN DESCRIPTION:

In the written description at page 1, please add the following paragraph and sub-heading at line 3:

CROSS-REFERENCE TO RELATED APPLICATION

This application claims priority to US provisional patent application No. 60/422,277, filed on October 29, 2002; and to PCT application PCT/US03/344414, filed on October 29, 2003.

Please add the following abstract as a separate page following the claims:

ABSTRACT OF THE DISCLOSURE

Beamforming systems having a few bits of channel state information fed back to the transmitter benefit from low complexity decoding structures and performances gains compared with systems that do not have channel state feedback. Both unit rank and higher rank systems are implemented. Substantial design effort may be avoided by following a method of using functions formulated for space-time systems with the change that the channel coherence time is equated to the number of transmit antennas and the number of antennas in the space-time formulation is fixed at one.